GOVERNMENT OF MADRAS. Sectt. II-28 —60,006—31-10-50.

P.W. (195/) Department.

~~Endorsement~~
~~D.O.~~
Memorandum
~~Lodged~~

No. 1312 J/57-3

Dated 24-12-1951.

close

FURTHER PAPERS.

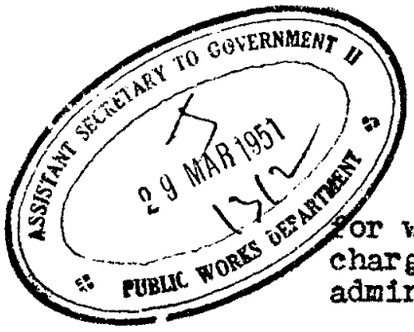
Department.	Number.	Series.	Date.

From Sri
T.S.Venkatarama Ayyar,B.E.,I.S.E.,
Chief Engineer for Grow More Food,
Chepauk, M a d r a s.

To
The Ex-Officio Secretary to Government,
Food & Agriculture Department,
Chepauk, M a d r a s.

Letter No. 205/51 B-1 dated 20--3--1951.

Sir,



Sub: Irrigation--South Kanara District--Udipi Taluk--Restoration of Sorkal Tank--Plans and Estimate.

I forward herewith an estimate amounting to Rs.44,100 for works or Rs. 57,377/- including direct and indirect charges for the above scheme for favour of obtaining administrative approval of Government.

2. The report accompanying the estimate explains the proposals clearly. The proposal, though unproductive, has been recommended by the Collector for its G.M.F. value and the backwardness of the District.

3. The scheme is a simple one and can be completed in one season. I therefore, recommend that this scheme may be included as one of the Intensive Cultivation Schemes as Item No. 62 of the Supplementary Programme for 50-51 and sanctioned at an early date.

4. The estimate is chargeable to "68 Construction of irrigation etc. works - unproductive - Non-system works.

for Chief Engineer for G.M.F.

Enclosure:
One estimate with report.
One key map. (will follow)
One financial forecast.
One copy of Collector's letter.

Copy to the Secretary to Government, P.W.D. for advance information.
Encl. One estimate with report.
One key map. (will follow.)
One copy of Collector's letter.
One financial forecast.

j.k.21/3

P.W.D (J)

A.S.

J

P.W.D(J)

A.S.

Please see the orders at the bottom of plans.

F&A(FP) Deptt. may perhaps be requested to state whether final orders in the reference overleaf have been issued and if so to furnish a copy of the order. | X

DAS 8/9/D.

(H.S.V.)

F&A (J.P.)

BOARD OF REVENUE P1951

.361.52

F&A(F.P.II-A)

A.S. With reference to X above, the P.W.D. may be informed that no final orders have yet been passed on the Scheme, as a revised estimate for the work is awaited from the C.E. (J:M:F). As soon as it is received, the Scheme will be examined and placed before the Cabinet Committee for decision. A copy of the final orders passed will, no doubt, be communicated to the P.W.D. | X

2. With these remarks, the file may be returned to the P.W.D.

19.9.51 BK 19.9.51

19/9 19/9 D.S.

P.W.D. P.W.D.

83036 F&A(F.P.II A) Endt No. 36133/51-I 21.9.51

13127/S.

P.W.D.(J.)

A.S.

Please see the note of F&A(FP) Deptt. on p2 ante. This file may be on hand the final orders of F&A(FP) Deptt. in the matter as received on 25-11-51 otherwise.

24/9/52 reminder. 26/9/52

27.5.7

A.S.

F&A(FP) Deptt. may be requested to state whether final orders in the matter have since been issued and if so to put up a copy of the orders.

10/12/51 10/12/51

11/12/51

RWDU.O. 13127/S.2 11-12-51

F.&A.(FP.II-A)

A.S.

[Last seen at p. 2 ante]

2. The C.E. has since submitted a copy of the revised estimate for the work costing Rs. 16,440/- for works or Rs. 21,375/- inclusive of direct and indirect charges, which has been administratively approved by him, as it is within his powers of sanction. The scheme as sanctioned at present by the C.E. as a P.W.D. irrigation scheme is not eligible for a subsidy from the G.O.I. as its unit cost exceeds the yardstick of Rs. 250/- per ha fixed by the G.O.I. to qualify for their financial assistance. But the

DY. A.D. (P.) 14 DEC 1951 47938 FOOD PRODUCTION

2(b)

Scheme is capable of being treated as a T.D. Scheme within the provisions of the Madras Act XIX of 1949, in which case the hurdle of the yardstick will not present itself and the Scheme will be eligible for a subsidy, as the principle of yardstick does not apply to T.D. Schemes. The above question is under examination by this department. In the circumstances, this department may adhere to the promise already held out at X, or p.2 ante.

3. With these remarks, the file may be returned to the P.W.D.

19/12/51 — 19.12.51

19/12/51

Pwd(J)

A.S
D.S
P.W.D

A.S.

Please see the note of F&A(FP) Dept. from the middle of p.2(a) ante. As a revised estimate for the scheme has already been sanctioned by the Govt, these papers may now be recorded in a mem. The orders of the F&A(FP) Dept. referred to at 'A' above may be dealt with separately when received in this Dept.

20/12/51

23/12/51

F&A(FP.II-A) No. 47938/51-1
19-12-51

ASSISTANT SECRETARY TO GOVT.
20 DEC 1951
PUBLIC WORKS DEPARTMENT

109038

Mems. 1312J/51-3
24-12-51.

Financial Forecast of Sorkal Tank.

		Rs.
Cost of the Scheme	....	44,100
Cost of the scheme including Direct & Indirect.		57,377

Revenue.

		Rs.
51.6 acres of II crop at 9-14-0 per acre	...	509-6
14.75 acres of I crop at ~~Rs~~ 7.1 per acre	...	104-1
Total		613.7
Present assessment		471.2
Additional Revenue		142.5

Gross Revenue on gross outlay $\frac{142.5}{57377} \times 100$ = 0.25%

As this is less than 5% the scheme is eligble for subsidy from Government of India.

Gross Outlay	...	57,377
Gross Revenue	...	142.5

20 times G.R. 142.5 x 20 -- 2850

Net outlay -- Gross outlay - 2850 = 57377 - 2850 = 54527

Subsidy 50% of Net outlay 27263.5 or 27264 = Subsidy.

Net Provincial Government's share on cost of works =

44100 - 27264 = 16836

Net Provincial Government's share on Total Outlay

57377 - 27264 = 30113

Net Revenue = 142.5 - 7.1 = 135.4

Gross Revenue	...	~~14x25x~~ 142.5
Collection charges at 5%	...	7.1
(Maintenance charges not allowed as the area is only existing I crop area).		135.4

Return on Provincial Government's share on works cost

$\frac{135.4 \times 100}{16836}$ = 0.8%

--do-- Total cost $\frac{135.4 \times 100}{30113}$ = 0.44%

L. Swaminathan 21/3/51

for Chief Engineer for Irrigation.

CE 21/3

J.K.21/3

Consolidated Abstract.

Circle: Coimbatore circle.
Division: South Kanara Division.
District: do.
Improvements to Sorkal tank - in No.100 Kuthyar village of Udipi taluk.

Item No.	Quantity.	Description of work.	Rate	Per.	Amount.
			Rs.		Rs.
1.	25,000 cft.	Earthwork excavation in hard gravelly soil with additional lead of 100 yards for forming the bund.	28	1000 Cft.	700
2.	1 No.	Constructing a masonry weir - vide est.No.1			5650
3.	1 No.	Constructing a 6" pipe sluice at L.s. 540 - est.No.2			1300
4.	1 No.	Constructing a towerhead sluice at L.s. 644 est.3			2950
5.	1 No.	Constructing a 6" pipe sluice at L.s. 663 est.4			850
6.	L.s.	Jungle clearance wherever necessary			50
7.	L.s.	Masonry core walls between L.s.486 to 512 and regrading rear channels.			200
8.	L.s.	Land acquisition - vide separate details.			29000
9.	L.s.	Add extra for lifts and variation of soil.			500
10.	L.s.	Unforeseen item, baling etc.			800
11.		Contingent and petty supervision charges 5 percent.			2100
					44100

Direct and indirect charges.

Works outlay.	44,100
Tools and plant at 2% on works outlay	882
Audit and accounts 1%	441
Establishment 25%	11,025
Pensionary charges at 8.43% on establishment.	929
	57,377

Sd. xxxxx
for Superintending Engineer,
Coimbatore Circle.
(True copy)
...

Report to accompany the estimate for improving the Sorkal tank in Kuttiyar village of Udipi taluk.

...

Est. Rs.57,377 including direct and indirect charge.
Rs.44,100 for works.

...

The tank is one of those included against item No.119 in the list of 5 year programme of G.M.F. schemes in South Kanara District.

2. Situation: The tank is situated at latitude 13°-12' and longitude 74°-59' in No.109 Kuttiyar village in Udipi taluk of South Kanara Dt. and is classified as poramboke. It is formed by constructing a small bund of about 200 ft. along connecting two rocky out crops in the middle of a valley with paddy fields above and below it.

3. Source of supply: It receives its drainage from its free basin of 0.51 sq.miles. The maximum discharge calculated on the maximum incidence of rainfall 15" in 24 hours will be 206 cusecs. The tank has got very heavy underground springs and there will be water in it throughout the year.

4. Surplus arrangements: There is a defined surplus course for this tank with a bed level of 89.00. After the South West monsoon, the ryots every year put up a bund across the course and preserve water for the second crop. The average level of this bund in April this year was 96.91 and used to vary between 95.00 and 97.00 every year. It is now proposed to construct a masonry surplus weir with protective arrangements in front and rear to discharge the surplus water in the rainy season with the crest at 95.00, length 3½ ft. and head of discharge 1'6".

Every year when the mud bund was put up at this place an extent of 7 to 8 acres of foreshore lands used to get submerged. The affected party referred the matter to the Revenue Department appealing to give them remission for second crop which they were not able to raise. The Revenue Divisional Officer, Coondapur in his proceedings No.D.Dis. 7993-39, d/10-3-49 dismissed the petition holding that this is not a new tank and is only the continuance of the old system which was in existence since 1890. However for the purpose of this estimate, provision is made for the acquisition of the above mentioned lands lest any trouble should crop up later on.

5. Bund:- The existing bund will be strengthened and will be formed to standards, the top width will be at 101.00 with a width of 4'-6". The front slope will be 1½:1 and the rear 2:1. Between L.S. 486 and 512, a masonry key wall will be constructed with the crest at 98.00, top width 2'0" and side slopes 1:8 to facilitate forming the bund on the rocky outcrop. This may have to be continued suitably at the time of construction if the rock is seen to continue downwards by cutting open the bund or by trial pit observations.

6. Revetments: No revetment is proposed for the bund except for a length of 10 ft. on either side of the propo sluice the top of which will be 1'0" above M.F.L. level.

7. Sluices: At present there is one open cut at 663 to supply water to the high level fields on the margin, the sill of which is at 94.80. At this place pipe sluice will be constructed with the sill at 9

At L.S. 644, there is a crude type of pipe sluicex in ruins with sill at 89.24. This supplies water to the fields in the centre of the valley and also to the fields on the left margin of the valley through a channel cut on the rear slope of the bund. At this place a tower head sluice with a sill at 83.00 will be constructed with a tunnel 2'0" x 2.1/2' in the rear. As it is dangerous to lead water over the rear slope of the bund from this sluice to the left side marginal lands it is proposed to construct a 6" pipe sluice at L.S. 540 with sill at 88.00, the position being at the junction of the bund with the rear rocky strata The water from the rear cistern will be lead through the existing channel into the fields proposed. Apart from these three sluices, a 6" pipe vent will be left in the surplus weir with the sill at 89.00 to irrigate about 13 acres in S.No.37 and 38. No regulating arrangement for this appears necessary as the head of water is not much and the vent can be closed by a stone slab with earth when not in use.

8. Ayacut: There is no registered ayacut under the tank and the extent of 2nd crop cultivation depends upon the incidence of rain in the North East monsoon. The first crop, however, is raised independent of the tank as the South West monsoon supplies enough water. On an average of 51.60 acres are benefitted by the tank for raising second crop which is now proposed to be raised to 66.22 acres for the full ayacut. On a few acres, 3rd crop is also raised of which there is no record. It is possible that the ryots may raise 3rd crop on the fields adjacent to the tank, which, however is not taken into consideration. This apart, the water from the tank will be useful for raising the first crop successfully in high level lands classed as 3rd class wet.

It is the usual practice for the ryots under this tank to supply water to the higher fields by baling out water from the lower ones even to a height of 10 to 12 ft. with the help of piccottahs. Hence fields situated at a higher level than the corresponding sluice level have been ~~inixm~~ included in the ayacut, allowing the present system to continue.

9. Land acquisition. Provision is made for the acquisition of lands in the foreshore and also for the formation of the bund.

10. General. With the improvement now proposed, there will be extension of irrigation over an area of 66.22 acres for the second crop and food crops to an extent m 33 tons will be assured, cost of which is Rs. 8250. The return is separately worked out will be 10.44% and the scheme is worth taking up from the G.M.F. point of view.

Copy of letter No.D.Dis.19327-49 dated 31-3-50 from Janab Syed Ahmed B.Sc.(Hons)., Collector of South Kanara, Mangalore to the Superintending Engineer, Coimbatore Circle.

Sub: Irrigation--G.M.F.--South Kanara District--Udipi taluk--Kuttyar village--restoration of Sorkal tank--Revenue and Administrative aspects--report.

Ref: Letter dated 19.8.49 no. 1152 SE from the Executive Engineer, South Kanara.

...

I furnish here below my remarks on the revenue and administrative aspects of the above proposal.

2. Revenue aspects: The source in question is not a registered one. Hence there is no registered ayacut under it. After improvements it is expected to supplement water supply to an extent of 66-35 acres during the first crop season and to an extent of 51-60 acres during second crop season. Besides, it will bring an additional extent of 14-62 acres under cultivation during the second crop season and irrigate an area of 66-35 acres during third crop season. A list of lands to be benefitted is appended herewith. As is seen from the list, the lands to be benefitted stand registered as wet I class, II class and III class. After improvements are effected, all these lands will be liable for transfer to wet I class and assessed at the highest wet rate by virtue of the fact that second and third crops could be raised on them with the help of the water from the source. The additional revenue that will accrue on this basis, will be as follows:

1. Area of the future ayacut on which 2 wet crops could be raised after improvements.	Ac.Ct.	66 35
2. Present assessment thereon.	Rs.	471 3
3. Future assessment at Rs.9-14-0 per acre.	Rs.	655 7
4. Additional Revenue(iii-ii)	Rs.	184 4

3. The reclassification of wet II and III class lands can be ordered by the Government in exercise of the powers vested in it under para 40 of the Resettlement Notification. This course may be adopted in preference to the levy of water charge for the following reason.

4. The levy of water charge is not in vogue in this district. The resettlement notification of this district also does not contemplate this course. Hence, to legalize the levy of water charge, a special enactment is necessary. Even after such an enactment, its levy for the second crop raised on lands registed as wet I class and wet II class (2 crop lands) may not be fully justifiable, as the assessment fixed for these lands includes charge for second crop also. I therefore recommend that the course explained in para 2 and 3 above may be adopted to avoid all complications attendant on the levy of water charge.

5. In addition to the additional revenue worked out in para 2 above, the Government can recover the whole or portion of the cost of improvement under section 3(3) of the Tank Improvement Act. I propose the recogery of the cost of the following rates on wet II class single crop lands and wet I class lands.

1. Wet II class lands (single crop per acre) Rs
2. Wet III class lands per acre.

...he cost to be
...itted is calculated
...t the above rates, the po...
...covered from the ryots to...
below.

Nature of the land.	...t	Rate	Amount.		
a. Wet II class	2.05	75	153	12	0
b. Wet III clas...	13.19	100	1319	0	0
			1474	12	0

...strative aspects: The proposal is feasible from the Administrative point of view. Though it is not remunerative, it is worthwhile taking it up from the point of view of food production for all reasonsexplained below:-

7. The proposal being unproductive, is eligible for subsidy of Rs.6289 from the Central Government (working sheet separately attached) as per instructions contained in the letter of the Government of India communicated in Board's Ref.No. F.P.II-8238-49-2 dated 10-1-50. The share of cost to be borne by the State Government will be reimbursed to the extent of Rs.1472-12-0 as worked out in para 5 above. The net cost to be borne by the State Government will be Rs.6289 - Rs. 1472-12-0 = Rs. 4816-4-0. As against this cost, the value of additional food grains estimated at 40 tons of rice (addl. yield from the II and III crops) works out to Rs. 10,000 at the rate of Rs.250 per ton. Thus it is clear that the value of the additional food grains for one year exceeds twice the share of the cost to be borne by the State Government. Under these circumstances, I am of opinion that the scheme deserves to be sanctioned from the G.M.F. point of view.

8. This is a deficit district so far as food is concerned. The peculiar geographical features of this district hardly allow any scope for the construction of remunerative major irrigation works. The district has to mainly depend upon the works of the kind dealt with in the reference to augment its food resources. It is necessary therefore that the irrigation schemes of this district are aimed mainly from the angle of increase in food production rather than from the angle of the financial return on the capital outlay. In the light of all these facts I recommend that the proposal in question may be taken up for execution at an early date.

...

(True copy)

Superintendent.